

Title (en)
CONDENSING HEAT RECOVERY STEAM GENERATOR

Title (de)
KONDENSATIONSWÄRMERÜCKGEWINNUNGS DÄMPFERZEUGER

Title (fr)
GÉNÉRATEUR DE VAPEUR À RÉCUPÉRATION DE CHALEUR DE CONDENSATION

Publication
EP 3394402 B1 20191009 (EN)

Application
EP 16808949 A 20161130

Priority

- EP 15201518 A 20151221
- US 201514975920 A 20151221
- EP 2016079238 W 20161130

Abstract (en)
[origin: WO2017108355A1] A condensing heat recovery steam generator (cHRSG) includes a main stack for an exhaust hot gas main flow, a bypass stack for allowing a fraction of exhaust hot gas to bypass the exhaust hot gas main flow, and a heat pump. The cHRSG includes a primary water circuit, a secondary water circuit, and a tertiary water circuit. The cHRSG additionally includes a feedwater line, a first heat exchanger for providing heat exchange between the feedwater line and the secondary water circuit, and a second heat exchanger for providing heat exchange between the primary water circuit and the tertiary water circuit. In the cHRSG, latent heat is partially recovered from said exhaust hot gas circulating in the bypass stack through the second heat exchanger and additional heat is extracted in the tertiary water circuit by said heat pump, contributing to a preheating performed in a preheater of the primary water circuit.

IPC 8 full level
F01K 23/10 (2006.01)

CPC (source: CN EP KR RU US)
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F02C 6/18 (2013.01 - KR); **F02G 5/02** (2013.01 - KR); **F22B 1/1815** (2013.01 - CN); **F22D 1/02** (2013.01 - EP US); **F24D 10/00** (2013.01 - KR);
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